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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09 998,133	12 03 2001	Seok Jung Yoon	0630-1378P	4561

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EXAMINER

DONOVAN, LINCOLN D

ART UNIT PAPER NUMBER

2832

DATE MAILED: 07 10 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/998,133

Applicant(s)
Yoon

Examiner
Lincoln Donovan

Art Unit
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____
- 2a) This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* If a claim for foreign priority is made, but certified copies are not received:

To Acknowledgement is made of a claim for deferred examination under 35 U.S.C. § 111(b).

Attachment(s)

- ☒ Notice of References Cited (PTO 892)
- ☐ Interview Summary (PTO 413, Paper No. 5)

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachofen [US 6,313,424] in view of Barkan [US 4,064,383].

Bachofen discloses a vacuum circuit breaker assembly [1] comprising:

- a plurality of switching mechanism units [1-3] having movable contacts [10] and stationary contacts [8] for connecting or breaking an electric circuit between an electric source and an electric load respectively and disposed in lengthwise direction;
- an actuator unit [44] including at least one rotary shaft [45] for providing the movable

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- a supporting frame [17, figure 1] for fixing and supporting the switching mechanism units and the actuator unit;

- a transfer link unit [47], which includes a swing transfer link means [43] coupled to the rotary shaft, for transferring rotational movement of the rotary shaft to horizontal movement for transferring rotational movement of the rotary shaft to a plurality of vertical movements [column 2, line 65-column 3, line 7]; and

- a plurality of rotational links [27, 32] coupled to the transfer link unit and switching mechanic units for transferring the horizontally straight movements of the transfer link means to vertical movements for position switching of the movable contacts.

Bachofen disclose the instant claimed invention except for: the straight horizontal movement and the specific mounting of the rotational links to the transfer link unit.

Barkan discloses a vacuum circuit breaker [figure 1] having a plurality of switching units [figure 4] each having a movable contact [22] connected to a pair of parallel straight transfer link unit members [36a, 36b, figure 2] by means of l-shaped rotational links [32a, 32b] with one end coupled to the switching unit and the other end coupled to a corresponding one of transfer link units.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the transfer link/rotational unit design of Barkan for the transfer link of Bachofen for the

2-3] disposed between the transfer link members

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to use provide guide links with the rotary links of Bachofen, as modified, as further suggested by Barkan, for the purpose of providing evenly distributed contact force.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bachofen in view of Barkan as applied to claim 1 above, and further in view of Hamm et al. [US 4,879,441] and Goodwin, Jr. et al. [US 3,787,649].

Bachofen, as modified, disclose the instant claimed invention except for the supporting frame having windows for showing the on/off state of the breakers by a location of the rotational link.

Hamm et al. discloses a viewing window [60] mounted on the frame of a circuit breaker.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a window on the circuit breaker frame of Bachofen, as modified, as suggested by Hamm et al., for the purpose of easily ascertaining contact status.

Goodwin, Jr. et al. discloses an on/off indicator connected with a horizontal transfer member [figure 4] operated by a rotary member in a circuit breaker.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the rotary transfer links be visible through the window of Bachofen, as modified, for the purpose of checking operational movement of the rotary members

should be directed to Examiner Lincoln Donovan whose telephone number is (703) 308-3111

Application/Control Number: 09/998,133

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The fax number for this Group is (703)-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

LDD

June 29, 2003

A handwritten signature in dark ink is written over a circular stamp. The signature is stylized and appears to be a set of initials. The stamp is circular and contains some text, which is partially obscured by the signature. The text in the stamp is difficult to read but seems to include the word "RECEIVED" and some numbers.